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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/799,133

03/12/2004

Kazunari Ito

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EXAMINER

HEYI, HENOK G

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

06/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/799,133	Applicant(s) ITO, KAZUNARI	
	Examiner Henok G. Heyi	Art Unit 2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Sakurai et al. US Patent No. 5,293,362 (Sakurai hereinafter).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Art Unit: 2609

Regarding claim 1, a carousel changer (an optical disc playback device of the so-called "carousel" type, see Abstract), comprising: a turntable provided with a plurality of trays around its rotating shaft, said trays carrying a disc thereon (a disc transport turntable which is adapted to rotate on a tray, col 4 line 45+); a motor rotating said turntable (a motor for driving the disc transport turntable col 3 line 45+); a rib formed annularly at said turntable and provided with a plurality of recessed portions and a plurality of raised portions for indicating the position of said plurality of trays in said turntable (axially downwardly projecting annular rib provided with a set of notches for each disc-holding section of the turntable, each set of notches comprising a central position-determining notch and disc number-indicating notches, see col 4 line 50+); a sensor detecting (a single detection system, col 6 line 6) said recessed portions and said raised portions; and a controller controlling said motor based on the ratio of the width of said recessed portion and the width of said raised portion detected by said sensor (control circuit, see fig 8 and col 4 line 58+).

Regarding claim 2, the carousel changer according to claim 1, wherein said controller controls said motor based on the ratio of the widths of said recessed portion and said raised portion adjacent to each other (Fig.8/ item 33, the controller controls the position-determining notches whose dimension is greater than the dimension of the spaces between the notches that indicate the number assigned to each of the disc-holding sections, col 4 line 58+).

Art Unit: 2609

Regarding claim 4, the carousel changer according to claim 1, wherein said rib includes, a plurality of count areas (number-indicating notches, col 4 line 54) each for identifying one of said trays; and a plurality of stop areas (position-determining notches, col 4 line 53) for stopping the rotation of said turntable when said plurality of trays come to a prescribed position, said stop areas alternated with said count areas (axially downwardly projecting annular rib provided with a set of notches for each disc-holding section of the turntable, each set of notches comprising a central position-determining notch and disc number-indicating notches, see col 4 line 50+), said controller determines that said sensor ends detection of said count area and starts to detect said stop area when the width of said raised portion is at most the width of said adjacent recessed portion upon detecting said count area, and said controller determines that said sensor ends detection of said stop area and starts to detect said count area when the width of said raised portion is at most the width of said adjacent recessed portion upon detecting said stop area (the spacing between the notches in this embodiment is constant at the dimension, see col 5/ line 24-28 and line 43).

Regarding claim 5, the carousel changer according to claim 1, wherein said rib includes, a plurality of count areas each for identifying one of said trays; and a plurality of stop areas for stopping the rotation of said turntable when said plurality of trays come to a prescribed position, said stop areas alternated with said count areas, said controller identifies each of said plurality of trays based on the number of detected recessed portions or raised portions while said sensor detects said count area (axially

downwardly projecting annular rib provided with a set of notches for each disc-holding section of the turntable, each set of notches comprising a central position-determining notch and disc number-indicating notches, see col 4 line 50+).

Regarding claim 6, the carousel changer according to claim 5, wherein said controller counts the number of detected recessed portions or raised portions by determining that the width of said raised portion is wider than the width of said adjacent recessed portion (each of the position-determining notches whose dimension is greater than the dimension of the spaces between the notches that indicate the number assigned to each of the disc-holding sections, col 4 line 60+).

Regarding claim 7, the carousel changer according to claim 5, wherein the number of recessed portions or raised portions in said count area (number-indicating notches, col 4 line 54 and fig. 2) is different from the number of recessed portions or raised portions in said stop area (position-determining notches, col 4 line 53 and fig. 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2609

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakurai as applied to claim 2 above.

Regarding claim 3, Sakurai discloses a control device that controls a motor but it does not clearly mention about a timer. However, the Examiner takes the official notice that a timer is well known in the art. Therefore, it would have been obvious to one of ordinary in the art at the time the invention was made to modify the controls motor which includes the timer in order to count time for the sensor to detect the recessed portion or raised portion.

Contact

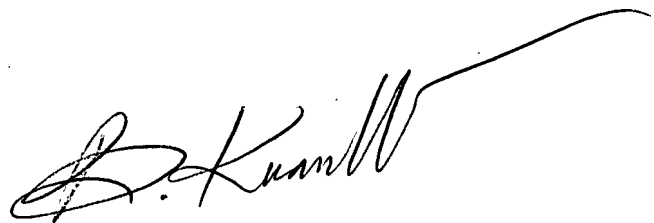
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henok G. Heyi whose telephone number is (571) 272-1816. The examiner can normally be reached on Monday to Friday 7:30 to 5:00 EST.

Art Unit: 2609

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HGH

A handwritten signature in black ink, appearing to read 'Kieu-Oanh Bui', with a long horizontal line extending to the right.

**KIEU-OANH BUI
PRIMARY EXAMINER**